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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/632,352

08/01/2003

Will Watson

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7590 05/16/2007  
BorgWarner Inc.  
Patent Administrator  
3850 Hamlin Road  
Auburn Hills, MI 48326-2872

EXAMINER

VANAMAN, FRANK BENNETT

ART UNIT

PAPER NUMBER

3618

MAIL DATE

DELIVERY MODE

05/16/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/632,352

Applicant(s)

WATSON ET AL.

Examiner

Frank Vanaman

Art Unit

3618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 108-138 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 108-138 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 3/1/07.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

**Continued Examination Under 37 CFR 1.114**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 1, 2007 has been entered.
2. Claims 108-138 remain pending.

**Drawings**

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the clutch engagement decrease associated with a second predetermined speed difference beyond a first difference (claims 108, 109, 110, 120, 132, 138) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

**Claim Rejections - 35 USC § 112**

4. Claims 108-138 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 108, 109, 110, 120, 132, 138 refer to control of a clutch engagement based on a first predetermined difference in speed values, and then continue to recite a further control based on a second predetermined difference in speed values. The specification and drawings as filed fail to teach the use of a second value as claimed. Applicant's specification, at page 36 refers to the determination of a difference in speed and comparison with an allowable threshold and the ramping up of clutch engagement, and pages 39-40 present a table with exemplary speed difference thresholds but fails to teach different thresholds for initiating increase and decrease of clutch engagement. Page 41 refers to the use of a single set-point threshold value, and page 44 refers to the ramping down of clutch engagement - but fails to refer to a second value which applicant now claims. Page 45 of the specification refers to the use of the same values for clutch engagement ramping up and ramping down.

**Claims Not Rejected over the Prior Art**

5. Claims 108-138 are not rejected as being either unpatentable over or anticipated by the prior art of record, however they are not in condition for allowance at this time in view of the rejections under 35 USC §112, first paragraph.

**Response to Comments**

6. Applicant's comments, filed with the Request for Continued Examination and associated amendment have been carefully considered. Applicant has asserted, with respect to both the objection to the drawings and the claim rejections under 35 USC §112, first paragraph, that the first and second predetermined values are essentially different values of the same variable taken at different loops or cycles of the program

steps. The examiner notes that this argument appears to be at odds with the actual claim recitations. In claim 108, line 16, for example, the initial recitation of the microcontroller describes the taking of data at "predetermined times", which is understood to refer, possibly, to a cyclic nature. The recitation continues, describing the increase in a clutch engagement associated with the comparison of a speed difference and a first predetermined value "at said predetermined times" (e.g., claim 108, lines 18-20), which is understood to refer to this step occurring in association with the same predetermined times as described with regard to the microcontroller's data-taking. The recitation continues (claim 180, lines 21-23) with a description of an decrease in clutch engagement associated with the comparison of the same speed difference ("said speed difference", line 21) with a second predetermined value, again "at said predetermined times", which appears to be clearly directed to the same times associated with the comparison of the difference and first predetermined value and the data-taking associated with the microcontroller. In effect the claim links all three of these steps together with the recitation of the predetermined times, and the two comparisons are additionally linked with the recitation of the same "said speed difference", understood to refer to a single value, which single value, absent further distinction, would be taken in association with a single cycle of the program. Applicant's specification does not provide any disclosure to suggest that there are two comparisons are made in the same step (as was noted in the previous office action). While applicant's arguments might describe a condition that the specification supports, the claims do not. If indeed applicant is attempting to suggest that the two predetermined values are read in different cycles of the program, then it is not clear if the claims are valid for a condition where no change occurs. Additionally, in view of applicant's comments it is not clear whether the program performs only a comparison and clutch increase in one cycle and then only performs a comparison to another value and clutch decrease in another different cycle.

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### Conclusion

7. Any inquiry specifically concerning this communication or earlier communications from the examiner should be directed to F. Vanaman whose telephone number is 571-272-6701.

Any inquiries of a general nature or relating to the status of this application may be made through either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A response to this action should be mailed to:

Mail Stop \_\_\_\_\_  
Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450,

Or faxed to:

PTO Central Fax: 571-273-8300

**F. VANAMAN**  
**Primary Examiner**  
**Art Unit 3618**

  
5/9/07